

REMARKS

This is in full and timely response to the Office Action mailed on December 13, 2007.

Claims 30-32 and 34-45 are currently pending in this application, with claim 30 being independent. *No new matter has been added.*

Reexamination in light of the following remarks is respectfully requested.

Entry of amendment

This amendment *prima facie* places the case in condition for allowance. Alternatively, it places this case in better condition for appeal.

Accordingly, entry of this amendment is respectfully requested.

Prematureness

Applicant, seeking review of the prematureness of the final rejection within the Final Office Action, respectfully requests reconsideration of the finality of the Final Office Action for the reasons set forth hereinbelow. See M.P.E.P. §706.07(c).

New non-final Office Action

At least for the following reasons, if the allowance of the claims is not forthcoming at the very least and a new ground of rejection made, then a new non-final Office Action is respectfully requested.

Claim rejections

Paragraph 4 of the Office Action indicates a rejection of claims 30-38, 40-41, and 44-45 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 5,130,804 to Tamura et al. (Tamura) and U.S. Patent No. 6,147,389 to Stern et al. (Stern) in view of Japanese Application Publication No. 07-212633 (Kawabe), and further in view of Japanese Application Publication No. 10-321827 (Takachi).

This rejection is traversed at least for the following reasons.

Claims 30-38, 40-41, and 44-45 - The features of claim 33 have been wholly incorporated into amended claim 30. Since claim 33 has been examined within the Final Office Action, **no “further search and/or consideration” of amended claim 30 is believed to be required.**

Claims 31-32, 34-38, 40-41, and 44-45 are dependent upon claim 30. Claim 30 is drawn to an optical system having an optical module, the optical module comprising:

an optical element (11) including a light receiving portion (15); said light receiving portion (15) being between a shielding layer (22) and a lens (21);

an optical filter (20) between said lens (21) and a diaphragm portion (19A) of a lens barrel (19), an opening through said diaphragm portion (19A) exposing said optical filter (20);

a plate (13) between said lens barrel and a wiring board (4), said wiring board (4) being between said optical element (11) and said plate (13),

wherein said plate is of a first material, said wiring board (4) being of a material other than said first material,

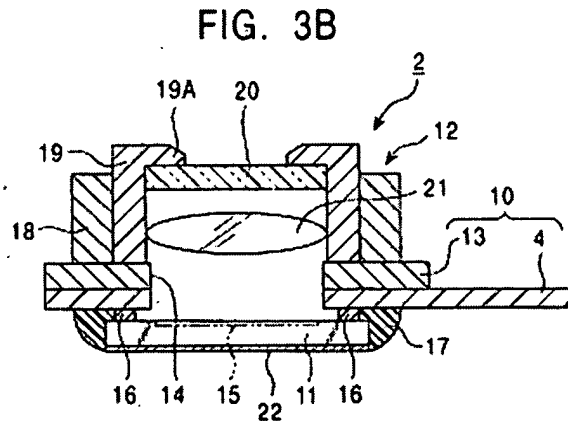
wherein said light receiving portion (15) and said lens (21) are disposed along an optical axis,

wherein a through-hole extends through said lens barrel (19), said plate (13), and said wiring board (4),

wherein said optical axis extends through said opening, said optical filter (20), and said through-hole,

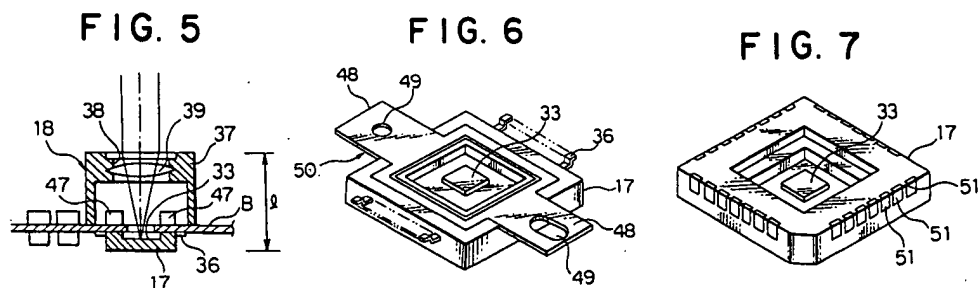
wherein said lens barrel (19) is in an inner periphery of a holder (18), said plate (13) being between said holder (18) and said wiring board (4).

For convenience, Figure 3B of the specification as originally filed is provided hereinbelow.



Tamura - Tamura arguably teaches a compact recording apparatus with functional components mounted on a substrate.

Figures 5-7 of Tamura are provided hereinbelow.



Tamura arguably teaches that the lens unit 18 is composed of the lens-barrel 37 and a group of lenses 39 which are provided inside the lens-barrel 37 so that the peripheral portion of the lens group is held by the inner circumferential surface of the opening 38 formed at the upper end of the lens-barrel 37 (Tamura at column 4, lines 56-60).

Whereas claim 30 provides for a holder (18), Tamura fails to disclose, teach, or suggest the presence of a holder.

- *Thus, Tamura fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.*

Stern - Stern arguably teaches an image sensor package with image plane reference.

The Office Action cites Figure 7A of Stern, which is provided hereinbelow.

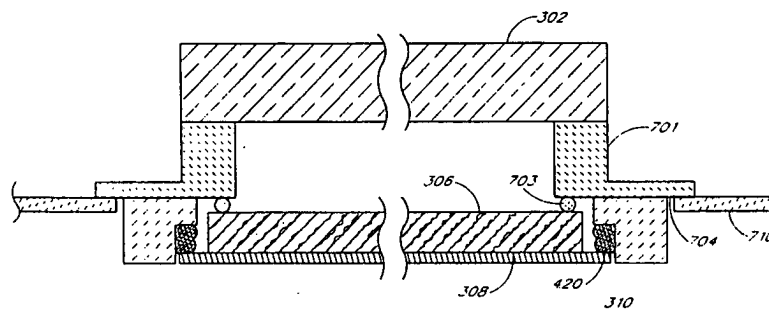


FIG. 7A

In the assembly 700, a first upper portion of a window standoff frame 701 supports the window 302 (Stern at column 6, lines 9-11).

Whereas claim 30 provides for a holder (18), Stern fails to disclose, teach, or suggest the presence of a holder.

- Thus, Stern fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.

Kawabe - Kawabe arguably teaches a hybrid integrated circuit for solid-state image pickup element sensor camera.

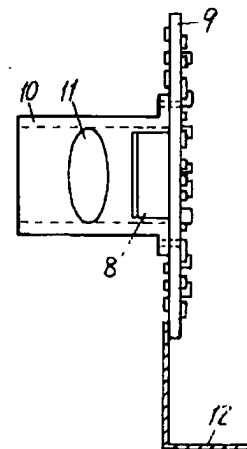
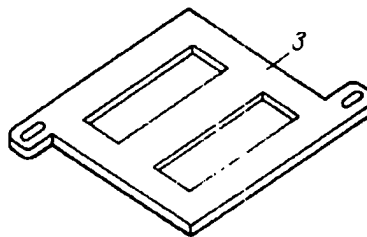
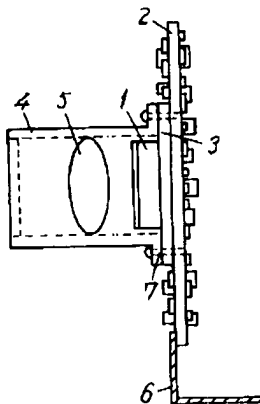
Figures 1-3 of Kawabe are provided hereinbelow.

FIGURE 1

FIGURE 2

FIGURE 3

- | | |
|----------------------------|----------------------------|
| 1 CCDセンサ | 4 レンズ鏡筒 |
| 2 CCD駆動回路を
搭載した
配線基板 | 5 レンズ |
| 3 レンズ鏡筒固定用
金属板 | 6 電源供給用
リード線 |
| | 7 レンズ鏡筒
固定用金属板
ねじ止め穴 |

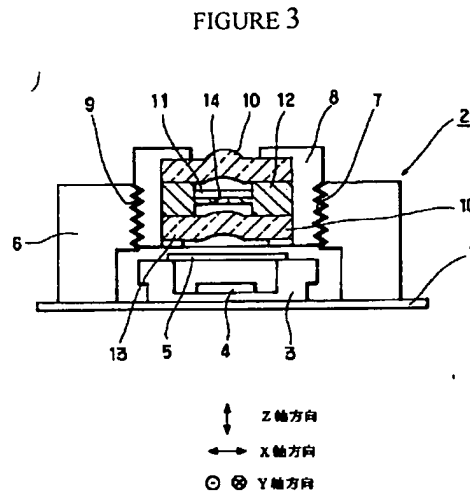


Whereas claim 30 provides for a holder (18), Kawabe fails to disclose, teach, or suggest the presence of a holder.

- Thus, Kawabe fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.

Takachi - Takachi arguably teaches an image-pickup device and camera.

Figure 3 of Takachi is provided hereinbelow.



The Office Action cites element 6 of Takachi as being the claimed holder 6 (Office Action at page 8).

While Takachi arguably teaches the presence of a printed-circuit board 1, a review of Figure 3 reveals that Takachi fails to disclose, teach, or suggest the presence of a plate between the alleged holder 6 and the printed-circuit board 1.

- ***Thus, Takachi fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.***

To account for this deficiency within Takachi, the Office Action asserts that the teaching of Tamura, Stern, and Kawabe combined within that of Takachi would have the plate being between the holder and the wiring board since the barrel is attached to the barrel by screw threads 7 and 9 (Office Action at page 8).

In response to this assertion, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

Here, a review of the machine translation of Takachi in paragraphs [0005] through [0008] provides the following:

[0005] [Problem(s) to be Solved by the Invention] By the way, according to conventional image pick-up equipment 2 as shown in drawing 3, there were the following faults. A member called a lens-barrel 6 intervenes between the package 3 which contains [1st] an image sensor 4 first, and the optic attachment component 8 holding optics 10, 11, 12, and 13. Furthermore, the miniaturization which attaches it in printed-circuit board 1 grade and which is strongly demanded these days while the cost of materials of image pick-up equipment 2 becomes high, since it ****s, for example, or components, such as adhesives, are also needed and components mark increase became difficult, and there was a fault that the number of erectors increased.

[0006] Components, such as adhesives or ****, were needed for immobilization of the optics 10, 11, 12, and 13 to the optic attachment component 8, and the 2nd had the fault that the man day which cannot be further disregarded to the immobilization started.

[0007] Since attachment by the lens-barrel 6 and the optic attachment component 8 is screwing, the structure of these members not only becomes complicated, but there is backlash and there is [3rd] a problem that focal distance adjustment is difficult. Furthermore, it thrusts wiring that image pick-up equipment 2 should be connected to a drive circuit, actually picturizing, reproducing an image pick-up image, and looking at this, in order for adjustment of the amount of bell and spigots to adjust a focal distance, and there is a fault that the troublesome activity of adjusting an amount must be done. This is very troublesome and is the fault which cannot be disregarded since a man day starts. Furthermore, the problem that a focal distance was out of order was also after focal distance adjustment according to the slack of **** etc.

[0008] It succeeds in this invention that such a trouble should be solved, components mark are reduced, and the number of erectors is reduced, and in

response to the request of a miniaturization, a focal distance is made easy to adjust and it aims at preventing that a focal distance is out of order after focal distance adjustment further.

As a solution to the problems described above within the machine translation of Takachi in paragraphs [0005] through [0008], Takachi refers to the invention within Figures 1 and 2 (Takachi at paragraph [0021]).

Figures 1 and 2 of Takachi are provided hereinbelow.

FIGURE 1

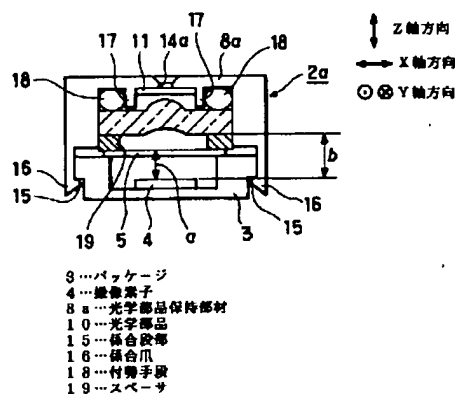
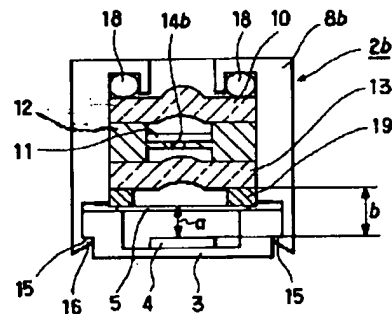


FIGURE 2



While Tamura, Stern, and Kawabe, fail to disclose, teach, or suggest the presence of a holder, Figures 1 and 2 of Takachi also fail to disclose, teach, or suggest the presence of a holder.

In describing the faults in using the holder 6 found within Figure 3 of Takachi, paragraphs [0005] through [0008] of Takachi teach away from a device having a holder 6. As a result, no motivation has been presented within the Office Action as to why the skilled artisan would have been motivated to rely upon the holder 6 found within Figure 3 of Takachi to modify the teachings of Tamura, Stern, and Kawabe. In this regard, it is improper to combine Tamura, Stern, and Kawabe with the holder 6 of Takachi (Figure 3) since paragraphs [0005] through [0008] of Takachi teach away from the use of the holder 6.

Withdrawal of these rejections and allowance of the claims is respectfully requested.

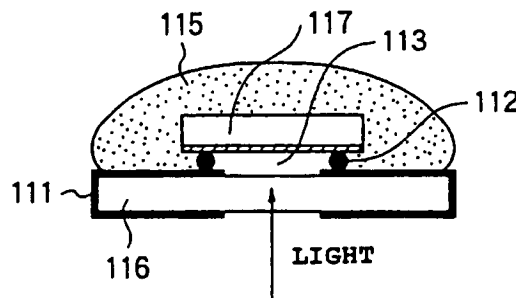
Paragraph 5 of the Office Action indicates a rejection of claim 39 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 5,130,804 to Tamura et al. (Tamura) and U.S. Patent No. 6,147,389 to Stern et al. (Stern) in view of Japanese Application Publication No. 07-212633 (Kawabe), and further in view of Japanese Application Publication No. 10-321827 (Takachi), and further in view of U.S. Patent No. 6,262,513 to Forukawa et al. (Forukawa).

In addition to the reasons provided hereinabove with respect to Paragraph 4 of the Office Action, this rejection is traversed at least for the following reasons.

The features of claim 33 have been wholly incorporated into amended claim 30. However, no rejection of claim 33 is found within Paragraph 5 of the Office Action.

Furthermore, the Office Action refers to Figure 39 of Forukawa.

FIG. 39



However, a review of Figure 39 of Forukawa reveals the absence of a holder.

- *Thus, Forukawa fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.*

Withdrawal of these rejections and allowance of the claims is respectfully requested.

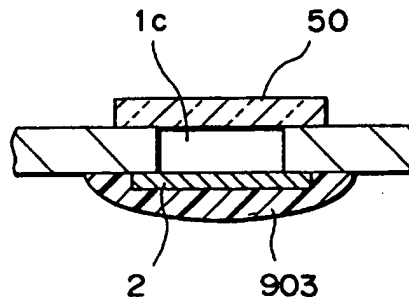
Paragraph 6 of the Office Action indicates a rejection of claims 42 and 43 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 5,130,804 to Tamura et al. (Tamura) and U.S. Patent No. 6,147,389 to Stern et al. (Stern) in view of Japanese Application Publication No. 07-212633 (Kawabe), and further in view of Japanese Application Publication No. 10-321827 (Takachi), and further in view of U.S. Patent No. 6,392,703 to Uchino et al. (Uchino).

In addition to the reasons provided hereinabove with respect to Paragraph 4 of the Office Action, this rejection is traversed at least for the following reasons.

The features of claim 33 have been wholly incorporated into amended claim 30. However, no rejection of claim 33 is found within Paragraph 6 of the Office Action.

Furthermore, the Office Action refers to Figure 7 of Uchino. Figure 7 of Uchino is provided hereinbelow.

FIG. 7



However, a review of Figure 7 of Uchino reveals the absence of a holder.

- ***Thus, Uchino fails to disclose, teach, or suggest an optical module wherein said lens barrel is in an inner periphery of a holder, said plate being between said holder and said wiring board.***

Withdrawal of these rejections and allowance of the claims is respectfully requested.

Conclusion

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. Therefore, this response is believed to be a complete response to the Office Action.

Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of the dependent claims not explicitly addressed herein, in future papers.

There is no concession as to the veracity of Official Notice, if taken in any Office Action. An affidavit or document should be provided in support of any Official Notice taken. 37 CFR 1.104(d)(2), MPEP § 2144.03. See also, *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989)(failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error).

Accordingly, favorable reexamination and reconsideration of the application in light of the remarks is courteously solicited.

Extensions of time

Please treat any concurrent or future reply, requiring a petition for an extension of time under 37 C.F.R. §1.136, as incorporating a petition for extension of time for the appropriate length of time.

Fees

The Commissioner is hereby authorized to charge all required fees, fees under 37 C.F.R. §1.17, or all required extension of time fees. If any fee is required or any overpayment

made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

Dated: January 18, 2008

Respectfully submitted,

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